## JUL 2 3 2008

## SEQUENCE LISTING

<110> PINNA, LORENZO DONELLA-DEANA, ARIANNA MARIN, ORIANO MOLOGNI, LUCA GUNBY, ROSALIND GAMBACORTI PASSERINI, CARLO SCAPOZZA, LEONARDO

- <120> ANAPLASTIC LYMPHOMA KINASE ASSAY, REAGENTS AND COMPOSITIONS THEREOF
- <130> 2503-1169
- <140> 10/547,842 <141> 2006-05-15
- <150> PCT/EP2004/002185
- <151> 2004-03-04
- <150> EP 03005186.6 <151> 2003-03-07
- <160> 5
- <170> PatentIn Ver. 3.3

- <210> 1 <211> 21 <212> PRT
- <213> Artificial Sequence

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- <223> Description of Artificial Sequence: Synthetic peptide
- <400> 1 Ala Arg Asp Ile Tyr Arg Ala Ser Phe Phe Arg Lys Gly Gly Cys Ala

Met Leu Pro Val Lys

- <210> 2
- <211> 21
- <212> PRT
- <213> Artificial Sequence

- <223> Description of Artificial Sequence: Synthetic peptide
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Ala Arg Asp Ile Tyr Arg Ala Ser Tyr Tyr Arg Lys Gly Gly Cys Ala 1 1 15

Met Leu Pro Val Lys 20

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## SEQUENCE LISTING

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<212> PRT
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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

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Ala Arg Asp Ile Phe Arg Ala Ser Tyr Phe Arg Lys Gly Gly Cys Ala 1 5 10 15

Met Leu Pro Val Lys 20

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<212> PRT <213> Artificial Sequence

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Ala Arg Asp Ile Phe Arg Ala Ser Phe Tyr Arg Lys Gly Gly Cys Ala 1 1 15

Met Leu Pro Val Lys 20

<210> 5

<211> 1620 <212> PRT

<213> Homo sapiens

<400> 5

Met Gly Ala Ile Gly Leu Leu Trp Leu Leu Pro Leu Leu Leu Ser Thr  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Ala Val Gly Ser Gly Met Gly Thr Gly Gln Arg Ala Gly Ser Pro
20 25 30

Ala Ala Gly Ser Pro Leu Gln Pro Arg Glu Pro Leu Ser Tyr Ser Arg 35 40 45

Leu Gln Arg Lys Ser Leu Ala Val Asp Phe Val Val Pro Ser Leu Phe 50 60

Arg Val Tyr Ala Arg Asp Leu Leu Leu Pro Pro Ser Ser Ser Glu Leu 65 70 75 80

Lys Ala Gly Arg Pro Glu Ala Arg Gly Ser Leu Ala Leu Asp Cys Ala 85 90 95

Pro Leu Leu Arg Leu Leu Gly Pro Ala Pro Gly Val Ser Trp Thr Ala 100 105 110

Gly Ser Pro Ala Pro Ala Glu Ala Arg Thr Leu Ser Arg Val Leu Lys 115 120 125

SEQUENCE LISTING
Gly Gly Ser Val Arg Lys Leu Arg Arg Ala Lys Gln Leu Val Leu Glu
130 135 140 Leu Gly Glu Glu Ala Ile Leu Glu Gly Cys Val Gly Pro Pro Gly Glu 145 150 155 160 Ala Ala Val Gly Leu Leu Gln Phe Asn Leu Ser Glu Leu Phe Ser Trp 165 170 175 Trp Ile Arg Gln Gly Glu Gly Arg Leu Arg Ile Arg Leu Met Pro Glu 180 185 190 Lys Lys Ala Ser Glu Val Gly Arg Glu Gly Arg Leu Ser Ala Ala Ile 195 200 205 Arg Ala Ser Gln Pro Arg Leu Leu Phe Gln Ile Phe Gly Thr Gly His 210 220 Ser Ser Leu Glu Ser Pro Thr Asn Met Pro Ser Pro Ser Pro Asp Tyr 225 230 240 Phe Thr Trp Asn Leu Thr Trp Ile Met Lys Asp Ser Phe Pro Phe Leu 245 250 255 Ser His Arg Ser Arg Tyr Gly Leu Glu Cys Ser Phe Asp Phe Pro Cys 260 265 270 Glu Leu Glu Tyr Ser Pro Pro Leu His Asp Leu Arg Asn Gln Ser Trp 275 280 285 Ser Trp Arg Arg Ile Pro Ser Glu Glu Ala Ser Gln Met Asp Leu Leu 290 295 300 Asp Gly Pro Gly Ala Glu Arg Ser Lys Glu Met Pro Arg Gly Ser Phe 305 310 315 320 Leu Leu Leu Asn Thr Ser Ala Asp Ser Lys His Thr Ile Leu Ser Pro 325 330 335 Trp Met Arg Ser Ser Ser Glu His Cys Thr Leu Ala Val Ser Val His 340 345 350 Arg His Leu Gln Pro Ser Gly Arg Tyr Ile Ala Gln Leu Leu Pro His 355 360 365 Asn Glu Ala Ala Arg Glu Ile Leu Leu Met Pro Thr Pro Gly Lys His 370 380 Gly Trp Thr Val Leu Gln Gly Arg Ile Gly Arg Pro Asp Asn Pro Phe 385 390 395 400 Arg Val Ala Leu Glu Tyr Ile Ser Ser Gly Asn Arg Ser Leu Ser Ala 405 410 415 Val Asp Phe Phe Ala Leu Lys Asn Cys Ser Glu Gly Thr Ser Pro Gly 420 425 430 Ser Lys Met Ala Leu Gln Ser Ser Phe Thr Cys Trp Asn Gly Thr Val 435 440 445

Leu Gln Leu Gly Gln Ala Cys Asp Phe His Gln Asp Cys Ala Gln Gly 450 455 460 **SEQUENCE LISTING** 

Glu Asp Glu Ser Gln Met Cys Arg Lys Leu Pro Val Gly Phe Tyr Cys 465 470 475 480 Asn Phe Glu Asp Gly Phe Cys Gly Trp Thr Gln Gly Thr Leu Ser Pro 485 490 495 His Thr Pro Gln Trp Gln Val Arg Thr Leu Lys Asp Ala Arg Phe Gln 500 505 510 Asp His Gln Asp His Ala Leu Leu Leu Ser Thr Thr Asp Val Pro Ala 515 520 525 Ser Glu Ser Ala Thr Val Thr Ser Ala Thr Phe Pro Ala Pro Ile Lys 530 540 Ser Ser Pro Cys Glu Leu Arg Met Ser Trp Leu Ile Arg Gly Val Leu 545 550 555 560 Arg Gly Asn Val Ser Leu Val Leu Val Glu Asn Lys Thr Gly Lys Glu
565 570 575 Gln Gly Arg Met Val Trp His Val Ala Ala Tyr Glu Gly Leu Ser Leu 580 585 590 Trp Gln Trp Met Val Leu Pro Leu Leu Asp Val Ser Asp Arg Phe Trp 595 600 605 Leu Gln Met Val Ala Trp Trp Gly Gln Gly Ser Arg Ala Ile Val Ala 610 620 Phe Asp Asn Ile Ser Ile Ser Leu Asp Cys Tyr Leu Thr Ile Ser Gly 625 630 635 Glu Asp Lys Ile Leu Gln Asn Thr Ala Pro Lys Ser Arg Asn Leu Phe 645 650 655 Glu Arg Asn Pro Asn Lys Glu Leu Lys Pro Gly Glu Asn Ser Pro Arg 660 665 670 Gln Thr Pro Ile Phe Asp Pro Thr Val His Trp Leu Phe Thr Thr Cys 675 680 685 Gly Ala Ser Gly Pro His Gly Pro Thr Gln Ala Gln Cys Asn Asn Ala 690 695 700 Tyr Gln Asn Ser Asn Leu Ser Val Glu Val Gly Ser Glu Gly Pro Leu 705 710 715 720 Lys Gly Ile Gln Ile Trp Lys Val Pro Ala Thr Asp Thr Tyr Ser Ile 725 730 735 Ser Gly Tyr Gly Ala Ala Gly Gly Lys Gly Gly Lys Asn Thr Met Met 740 745 750 Arg Ser His Gly Val Ser Val Leu Gly Ile Phe Asn Leu Glu Lys Asp 755 760 765 Asp Met Leu Tyr Ile Leu Val Gly Gln Gln Gly Glu Asp Ala Cys Pro 770 775 780 Ser Thr Asn Gln Leu Ile Gln Lys Val Cys Ile Gly Glu Asn Asn Val 785 790 795 800

Ile Glu Glu Glu Ile Arg Val Asn Arg Ser Val His Glu Trp Ala Gly 805 810 815 Gly Gly Gly Gly Gly Gly Ala Thr Tyr Val Phe Lys Met Lys Asp 820 825 830 Gly Val Pro Val Pro Leu Ile Ile Ala Ala Gly Gly Gly Arg Ala 835 840 845 Tyr Gly Ala Lys Thr Asp Thr Phe His Pro Glu Arg Leu Glu Asn Asn 850 860 Ser Ser Val Leu Gly Leu Asn Gly Asn Ser Gly Ala Ala Gly Gly 865 870 880 Gly Gly Trp Asn Asp Asn Thr Ser Leu Leu Trp Ala Gly Lys Ser Leu 885 890 895 Gln Glu Gly Ala Thr Gly Gly His Ser Cys Pro Gln Ala Met Lys Lys 900 905 910 Trp Gly Trp Glu Thr Arg Gly Gly Phe Gly Gly Gly Gly Gly Cys 915 920 925 Ser Ser Gly Gly Gly Gly Gly Tyr Ile Gly Gly Asn Ala Ala Ser 930 935 940 Asn Asn Asp Pro Glu Met Asp Gly Glu Asp Gly Val Ser Phe Ile Ser 945 950 955 Pro Leu Gly Ile Leu Tyr Thr Pro Ala Leu Lys Val Met Glu Gly His 965 970 975 Gly Glu Val Asn Ile Lys His Tyr Leu Asn Cys Ser His Cys Glu Val 980 985 990 Asp Glu Cys His Met Asp Pro Glu Ser His Lys Val Ile Cys Phe Cys 995 1000 1005 Asp His Gly Thr Val Leu Ala Glu Asp Gly Val Ser Cys Ile Val Ser 1010 1015 1020 Pro Thr Pro Glu Pro His Leu Pro Leu Ser Leu Ile Leu Ser Val Val 1025 1030 1035 1040 Thr Ser Ala Leu Val Ala Ala Leu Val Leu Ala Phe Ser Gly Ile Met
1045 1050 1055 Ile Val Tyr Arg Arg Lys His Gln Glu Leu Gln Ala Met Gln Met Glu 1060 1065 1070 Leu Gln Ser Pro Glu Tyr Lys Leu Ser Lys Leu Arg Thr Ser Thr Ile 1075 1080 1085 Met Thr Asp Tyr Asn Pro Asn Tyr Cys Phe Ala Gly Lys Thr Ser Ser 1095 Ile Ser Asp Leu Lys Glu Val Pro Arg Lys Asn Ile Thr Leu Ile Arg 1105 1110 1115 1120 Gly Leu Gly His Gly Ala Phe Gly Glu Val Tyr Glu Gly Gln Val Ser 1125 1130 1135

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Gly	Met		Asn 1140	Asp	Pro	Ser				val		val	Lys 1150	Thr	Leu
Pro	Glu	Val 1155	Cys	Ser	Glu	Gln	Asp 1160	Glu	Leu	Asp		Leu 1165	Met	Glu	Ala
	Ile 1170	Ile	Ser	Lys		Asn 1175	His	Gln	Asn		Val 1180	Arg	Cys	Ile	Gly
Val 118	Ser 5	Leu	Gln	Ser	Leu 1190	Pro	Arg	Phe		Leu 1195	Leu	Glu	Leu		Ala L200
Gly	Gly	Asp		Lys 1205	Ser	Phe	Leu		Glu 1210	Thr	Arg	Pro		Pro L215	Ser
Gln	Pro		Ser 1220	Leu	Ala	Met		Asp 1225	Leu	Leu	ніѕ		Ala L230	Arg	Asp
Ile		Cys 1235	Gly	Cys	Gln		Leu 1240	Glu	Glu	Asn		Phe L245	Ile	His	Arg
	11e 1250	Аlа	Ala	Arg		Cys 1255	Leu	Leu	Thr		Pro L260	Gly	Pro	Glу	Arg
Val 126	Ala 5	Lys	Ile	Gly	Asp L270	Phe	Gly	Met		Arg 1275	Asp	Ile	Tyr		Ala 1280
Ser	Tyr	Tyr	Arg	Lys 1285	Gly	Glу	Cys		Met L290	Leu	Pro	val		Trp L295	Met
Pro	Pro		Ala 1300	Phe	Met	Glu		11e L305	Phe	Thr	ser		Thr L310	Asp	Thr
тгр		Phe L315	Gly	٧a٦	Leu		Trp L320	Glu	Ile	Phe		Leu L325	Glу	Tyr	Met
	Tyr L330	Pro	Ser	Lys		Asn L335	Gln	Glu	va1		G]u .340	Phe	val	Thr	Ser
Gly 1345		Arg	Met	Asp 1	Pro .350	Pro	Lys	Asn		Pro L355	Gly	Pro	٧a٦		Arg .360
Ile	Met	Thr		Cys L365	Тгр	Gln	His		Pro 1370	Glu	Asp	Arg		Asn .375	Phe
Ala	Ile	Ile 1	Leu L380	Glu	Arg	Ile	Glu 1	Tyr 1385	Cys	Thr	Gln	Asp 1	Pro .390	Asp	val
Ile		Thr L395	Ala	Leu	Pro		G]u L400	Tyr	Gly	Pro		Va1 .405	Glu	Glu	Glu
	Lys 1410	٧a٦	Pro	val		Pro 415	Lys	Asp	Pro		G]y .420	val	Pro	Pro	Leu
Leu 1425	val	Ser	Gln	Gln 1	Ala .430	Lys	Arg	Glu		G]u L435	Arg	Ser	Pro		A1a .440
Pro	Pro	Pro	Leu 1	Pro [445	Thr	Thr	Ser	Ser 1	Gly .450	Lys	Ala	Ala		Lys 455	Pro

Thr Ala Ala Glu Val Ser Val Arg Val Pro Arg Gly Pro Ala Val Glu 1460 1470

SEQUENCE LISTING
Gly Gly His Val Asn Met Ala Phe Ser Gln Ser Asn Pro Pro Ser Glu
1475 1480 1485

Leu His Lys Val His Gly Ser Arg Asn Lys Pro Thr Ser Leu Trp Asn
1490 1495 1500

Pro Thr Tyr Gly Ser Trp Phe Thr Glu Lys Pro Thr Lys Lys Asn Asn 1505 1510 1515 1520

Pro Ile Ala Lys Lys Glu Pro His Asp Arg Gly Asn Leu Gly Leu Glu 1525 1530 1535

Gly Ser Cys Thr Val Pro Pro Asn Val Ala Thr Gly Arg Leu Pro Gly 1540 1550

Ala Ser Leu Leu Glu Pro Ser Ser Leu Thr Ala Asn Met Lys Glu 1555 1560 1565

Val Pro Leu Phe Arg Leu Arg His Phe Pro Cys Gly Asn Val Asn Tyr 1570 1575 1580

Gly Tyr Gln Gln Gln Gly Leu Pro Leu Glu Ala Ala Thr Ala Pro Gly 1585 1590 1595 1600

Ala Gly His Tyr Glu Asp Thr Ile Leu Lys Ser Lys Asn Ser Met Asn 1605 1610 1615

Gln Pro Gly Pro 1620